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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,246	03/17/2004	David Xing-Fei Deng	2003309-0046 (10021034-1)	5142
7590 02/12/2007 AGILENT TECHNOLOGIES, INC. Legal Department, DL429 Intellectual Property Administration P.O. Box 7599 Loveland, CO 80537-0599			EXAMINER PERREIRA, MELISSA JEAN	
			ART UNIT	PAPER NUMBER
			1618	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
31 DAYS		02/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/802,246

Applicant(s)

DENG ET AL.

Examiner

Melissa Perreira

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8,17 and 25 are drawn to a composition comprising a targeting agent which binds a VECSM group II or III polypeptide and a functional moiety, classified in class 424, subclass 1.69.
 - II. Claims 9-12 are drawn to an agent that reduces expression of a VECSM group II or III polynucleotide, classified in class 536, subclass 23.1.
 - III. Claim 13 is drawn to a method of inhibiting expression of a VECSM group II or III polypeptide using an agent comprising a ribozyme, classified in class 514, subclass 44.
 - IV. Claims 14-16 are drawn to a method of treating a condition with an agent comprising a ribozyme, classified in class 514, subclass 44.
 - V. Claims 18-20 are drawn to a method of treating a condition with a pharmaceutical comprising an antibody, classified in class 514, subclass 2.
 - VI. Claims 21 and 22 are drawn to a method of detecting or quantifying vascularization or angiogenic activity, classified in class 600, subclass 562.
 - VII. Claims 23 and 24 are drawn to a method of imaging angiogenesis, vasculature or body tissue, classified in class 600, subclass 468.

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- VIII. Claim 26 is drawn to a method of inhibiting angiogenesis or tumor growth, classified in class 514, subclass 6.
- IX. Claim 27 is drawn to a method of stimulating angiogenesis, classified in class 514, subclass 6.
- X. Claims 28 and 29 are drawn to the method of identifying a compound as a modulator of VECSM polynucleotide or polypeptide expression and the compound identified by the method, classified in class 424, subclass 9.2.
- XI. Claims 30-32 are drawn to a method of treating a subject suffering from a disease or condition, classified in class 424, subclass 9.2.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I,II and X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions are a composition comprising a targeting agent which binds a VECSM group II or III polypeptide and a functional moiety, an agent that reduces expression of a VECSM group II or III polynucleotide and a compound modulator of VECSM polynucleotide or polypeptide expression. The composition which binds a VECSM polypeptide does not necessarily modulate (reduce or increase) the expression of the VECSM polynucleotide or polypeptide and the compound modulators of VECSM polynucleotide or polypeptide expression do not necessarily reduce expression of the VECSM group II or III polynucleotide. For instance, the compound modulators of VECSM polynucleotide or polypeptide expression can increase the expression of a

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VECSM group II or III polynucleotide and not modulate the polynucleotide at all by increasing or reducing the expression of VECSM polypeptide. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper

3. Inventions I, III-IX and XI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions are a composition comprising a targeting agent which binds a VECSM group II or III polypeptide and a functional moiety, a method of inhibiting expression of a VECSM group II or III polypeptide using an agent comprising a ribozyme, a method of treating a condition with an agent comprising a ribozyme, a method of treating a condition with a pharmaceutical comprising an antibody, a method of detecting or quantifying vascularization or angiogenic activity, a method of imaging angiogenesis, vasculature or body tissue, a method of inhibiting angiogenesis or tumor growth, method of stimulating angiogenesis and a method of treating a subject suffering from a disease or condition. The methods of the instant groups all utilize different agents, such as those comprising a ribozyme or antibody, etc and do not use the composition of group I. They cannot necessarily be utilized together and in certain cases are opposing methods, such as the method of inhibiting angiogenesis and the method of stimulating angiogenesis. These methods would require different agents and

would have different mechanisms of action. For example, groups IV and V are methods of treating a condition but each uses a different agent. Group IV uses a composition comprising a ribozyme and group V uses a composition comprising an antibody.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

4. Inventions X, III-IX and XI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions method of identifying a compound as a modulator of VECSM polynucleotide or polypeptide expression and the compound identified by the method, a method of inhibiting expression of a VECSM group II or III polypeptide using an agent comprising a ribozyme, a method of treating a condition with an agent comprising a ribozyme, a method of treating a condition with a pharmaceutical comprising an antibody, a method of detecting or quantifying vascularization or angiogenic activity, a method of imaging angiogenesis, vasculature or body tissue, a method of inhibiting angiogenesis or tumor growth, method of stimulating angiogenesis and a method of treating a subject suffering from a disease or condition. The method of identifying a compound does not necessarily imply that a compound containing a ribozyme or antibody will be identified to treat a condition or be useful for the method of inhibiting expression of a VECSM group II or III polypeptide. Also the method of

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identifying a compound does not imply that a compound useful for detecting/quantifying vascularization or a method of imaging the vasculature will be identified, etc. Therefore, the methods are not usable together. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper

5. Inventions II, III-IX and XI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions are an agent that reduces expression of a VECSM group II or III polynucleotide, a method of inhibiting expression of a VECSM group II or III polypeptide using an agent comprising a ribozyme, a method of treating a condition with an agent comprising a ribozyme, a method of treating a condition with a pharmaceutical comprising an antibody, a method of detecting or quantifying vascularization or angiogenic activity, a method of imaging angiogenesis, vasculature or body tissue, a method of inhibiting angiogenesis or tumor growth, method of stimulating angiogenesis and a method of treating a subject suffering from a disease or condition. The agent that reduces expression of a VECSM group II or III polynucleotide does not necessarily contain a ribozyme or antibody and would not be useful for the method of inhibiting expression of a VECSM group II or III polypeptide or treating a condition. The agent does not necessarily provide for the means of detection/quantification of vascularization,

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imaging of the vasculature or inhibiting/stimulating angiogenesis. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include (i) an **election of an invention** to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i). Due to the complex nature of the instant restriction requirement, a written restriction requirement was necessitated. See MPEP § 812.01.

6. Claims 1-32 are generic to the following disclosed patentably distinct species:

7. Functional moiety:

8. a.) therapeutic or cytotoxic agent

9. b.) angiogenesis stimulator or inhibitor

10. c.) radiosensitizing agent or an imaging agent

11. The species are independent or distinct because not all therapeutic agent or cytotoxic agents would be capable of inhibition or stimulation of angiogenesis and are not necessarily imaging agents, such as radionuclides. These species would require individual searches and are therefore distinct. Applicant is required under 35 U.S.C. 121 to **elect a single disclosed species**, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

12. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a). The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for

rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not

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distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

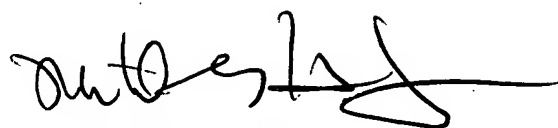
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Perreira whose telephone number is 571-272-1354. The examiner can normally be reached on 9am-5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MP
February 7, 2007

A handwritten signature in black ink, appearing to read "Michael G. Hartley", with a stylized flourish at the end.

MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER